

FIG. 1A

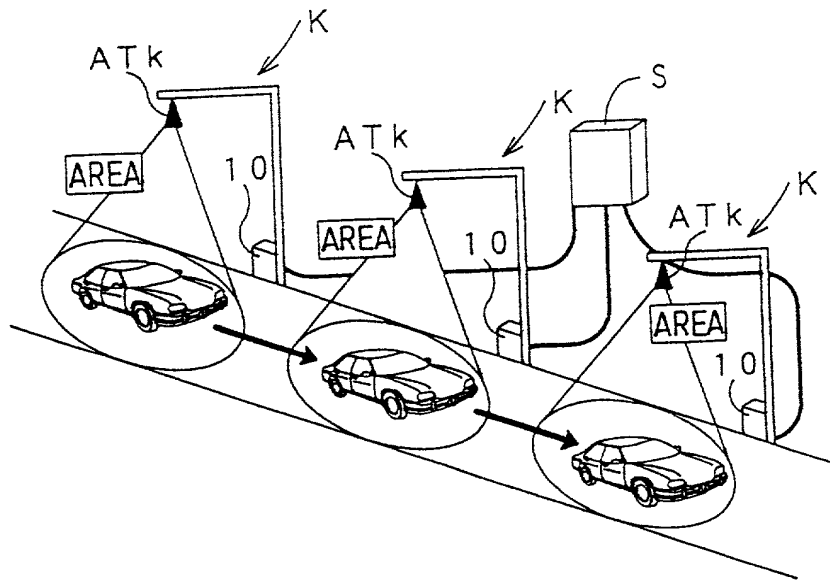


FIG. 1B

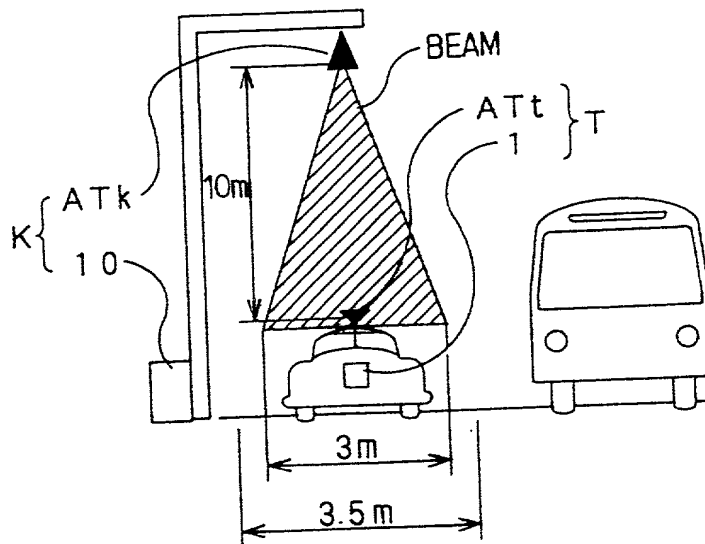


FIG. 2A

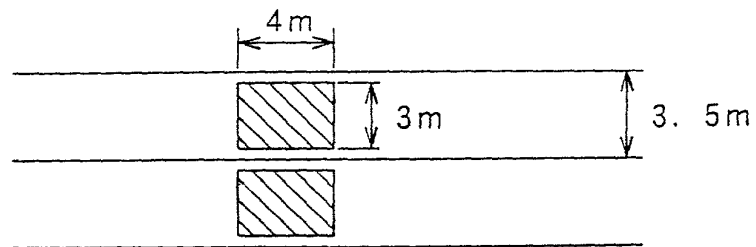


FIG. 2B

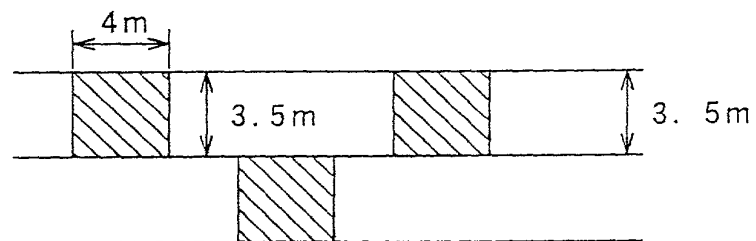


FIG. 2C

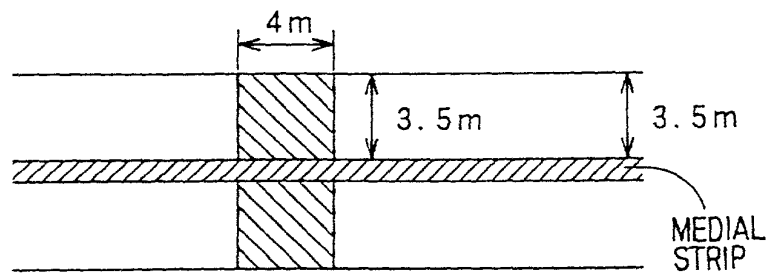


FIG. 3A

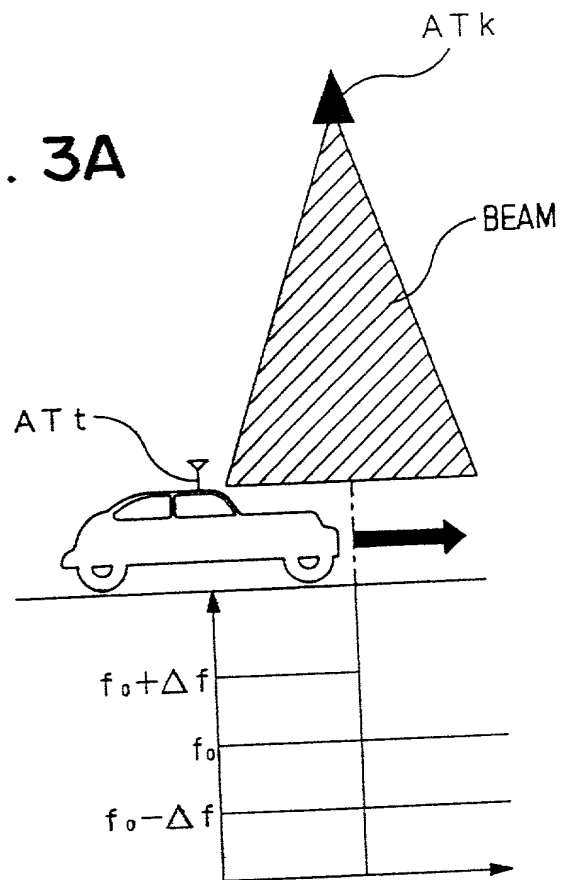
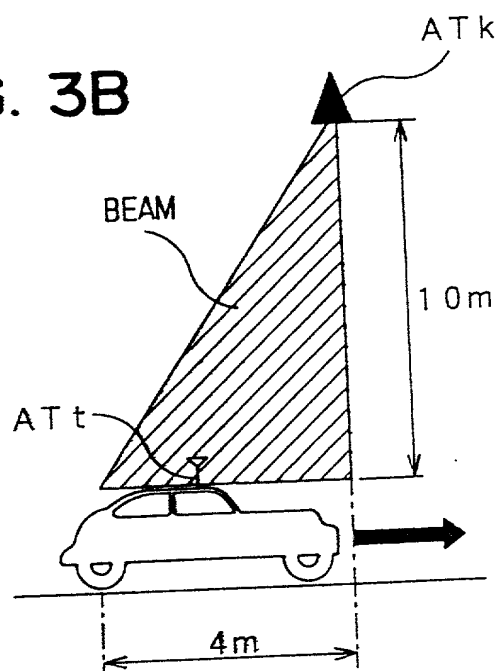
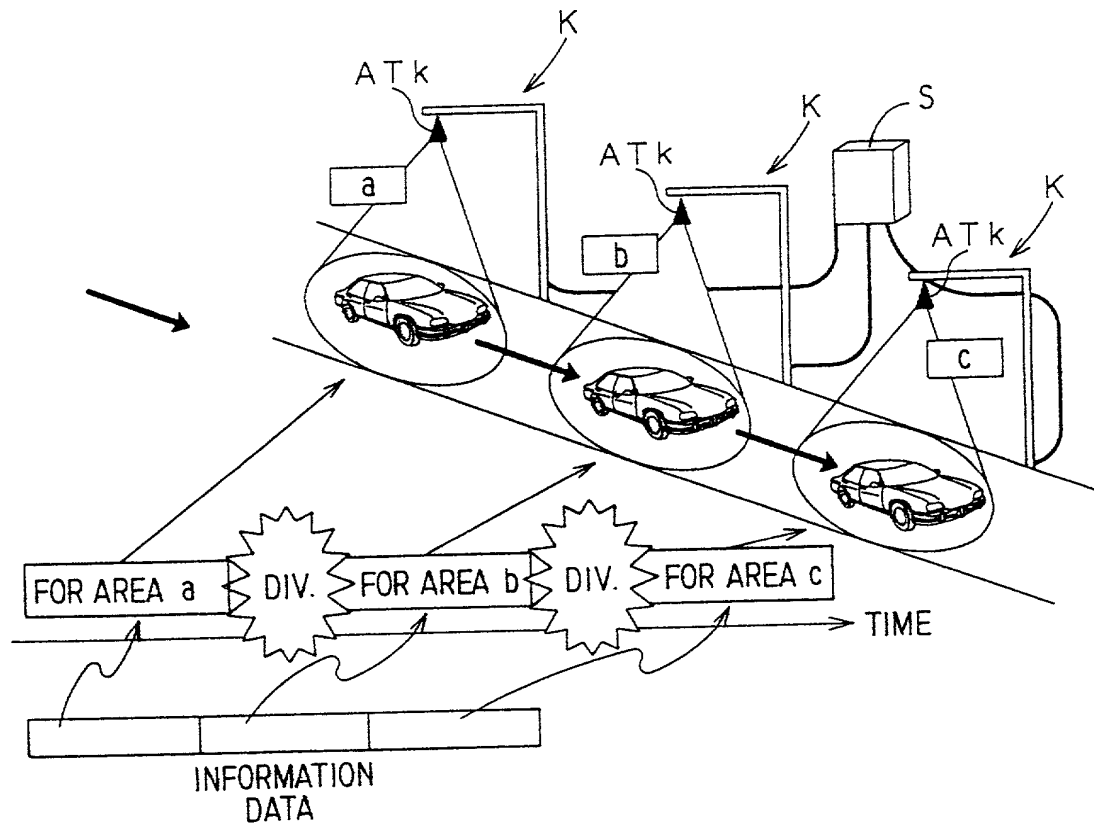


FIG. 3B



# FIG. 4A



# FIG. 4B

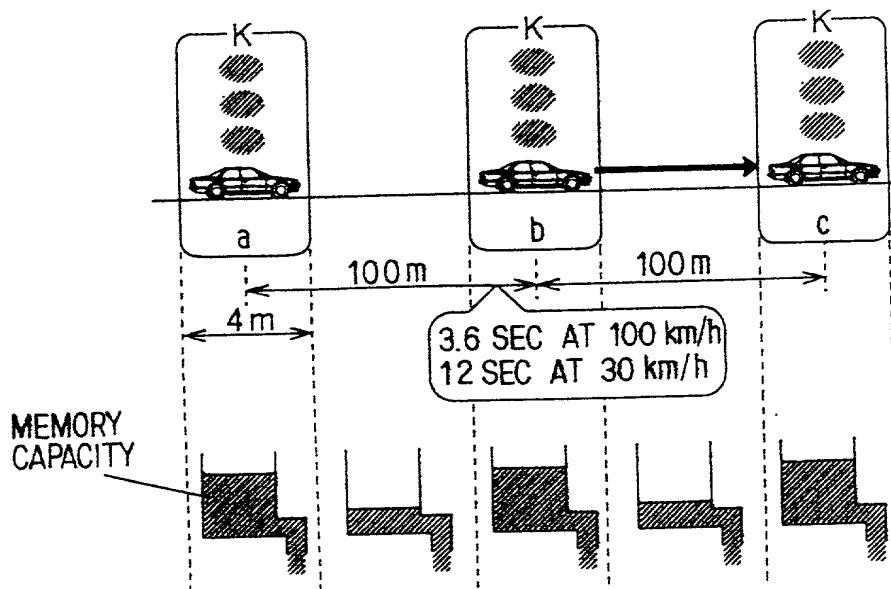
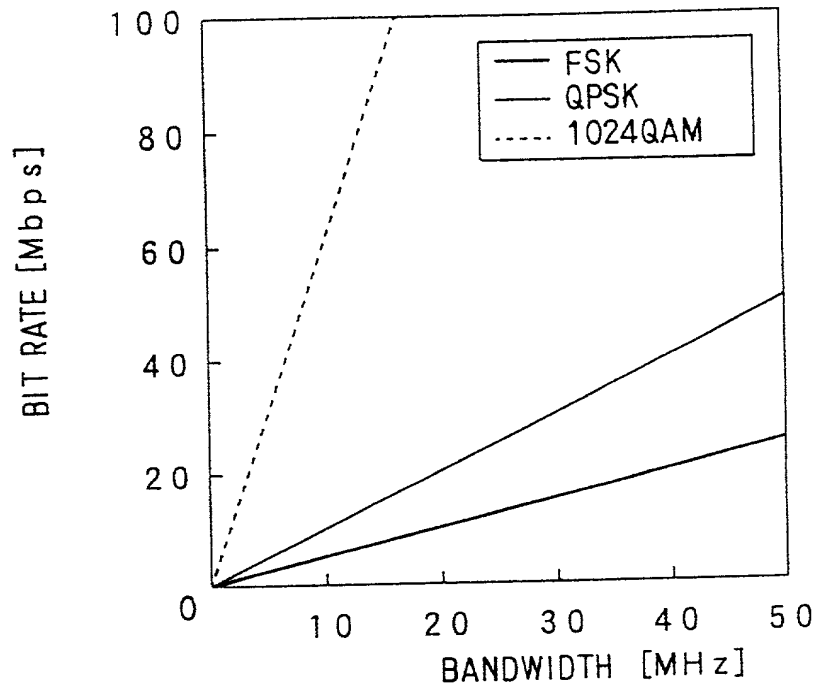


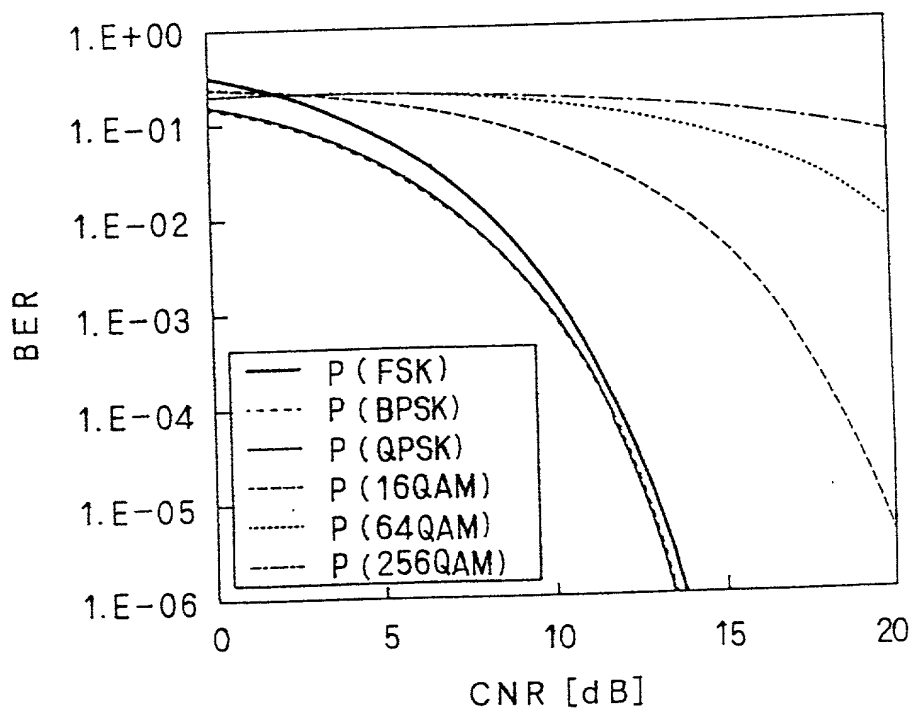
FIG. 5



# FIG. 6A

MODULATION	AVERAGE BER
F S K	$P_{FSK} = \text{erfc} \left( \frac{K_o}{\sqrt{2}} \right)$
B P S K	$P_{BPSK} = \frac{1}{2} \text{erfc} \left( \frac{K_o}{\sqrt{2}} \right)$
Q P S K	$P_{QPSK} = \frac{1}{2} \text{erfc} \left( \frac{K_o}{\sqrt{2}} \right)$
1 6 Q A M	$P_{16QAM} = \frac{3}{8} \text{erfc} \left( \frac{K_o}{\sqrt{10}} \right)$
6 4 Q A M	$P_{64QAM} = \frac{7}{24} \text{erfc} \left( \frac{K_o}{\sqrt{42}} \right)$
2 5 6 Q A M	$P_{256QAM} = \frac{15}{64} \text{erfc} \left( \frac{K_o}{\sqrt{170}} \right)$

# FIG. 6B



# FIG. 7A

PARAMETER	VALUE	
	SPOT	CONTINUOUS
POWER	10 dBm	
ANTENNA GAIN	20 dB	3 dB
DISTANCE	10 m	
FREQUENCY	37 GHz	
MODULATION	FSK, BPSK, QPSK	
AVERAGE BER	$1 \times 10^{-6}$	
RECEIVER NOISE	10 dB	
TEMPERATURE	300 K	
BANDWIDTH	1-200 MHz	

# FIG. 7B

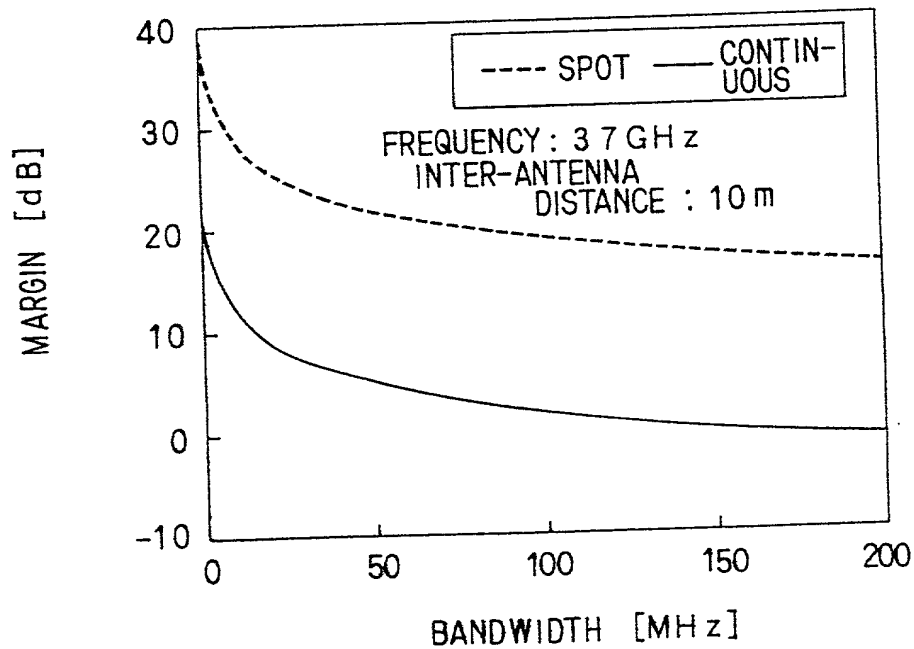


FIG. 8A

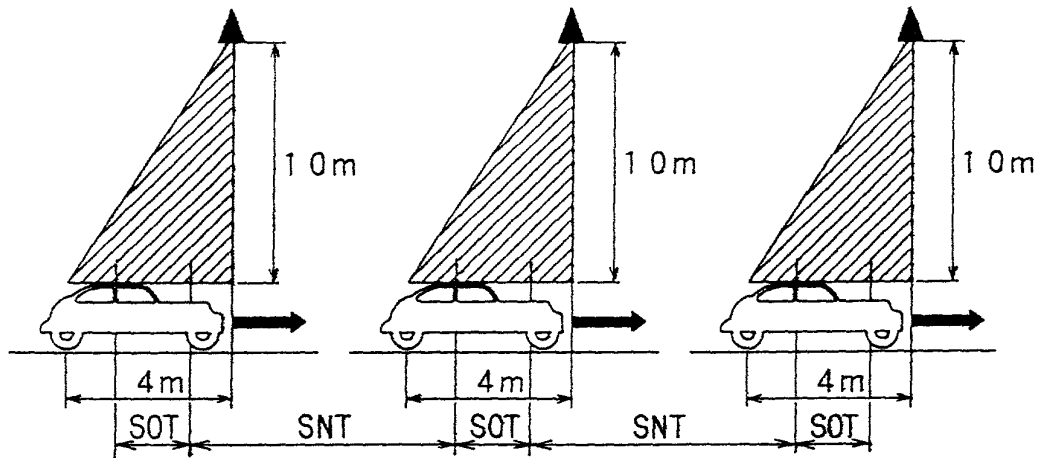


FIG. 8B

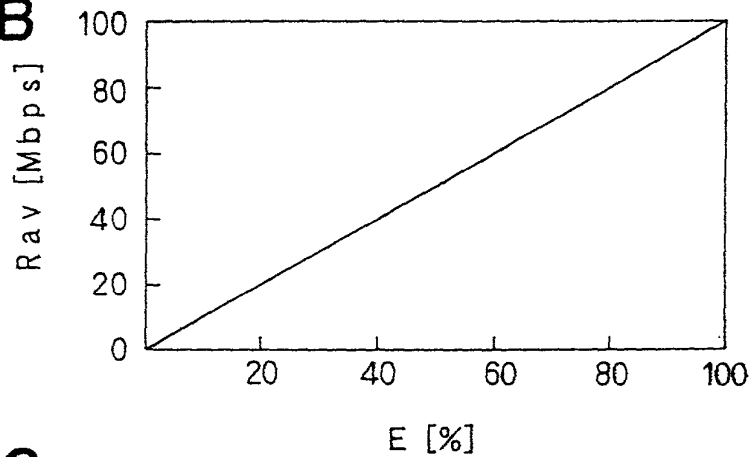
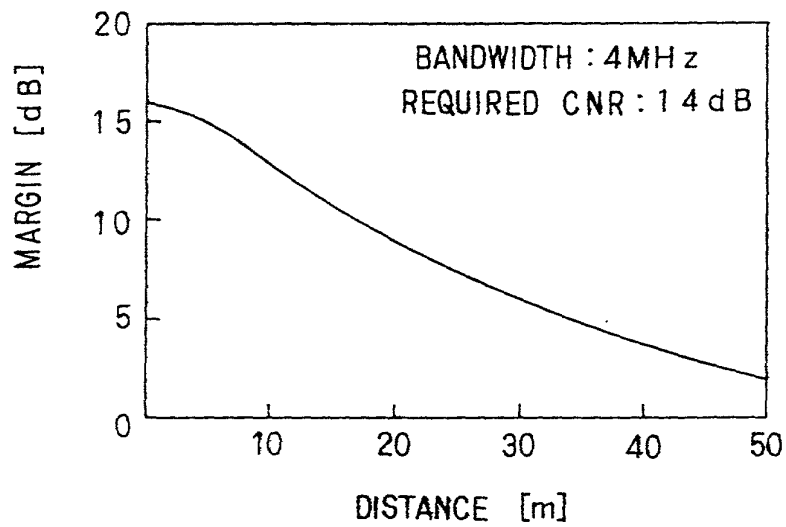


FIG. 8C





# FIG. 9

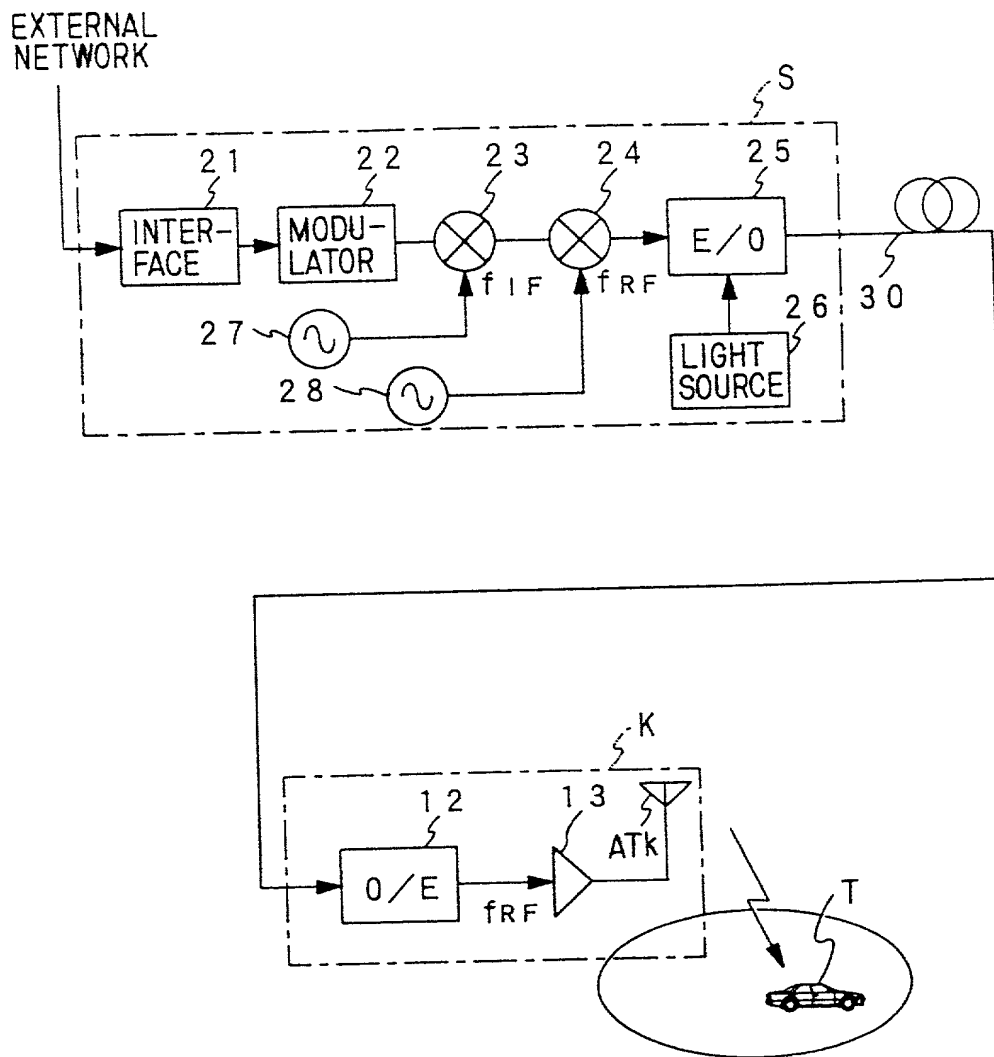


FIG. 10A

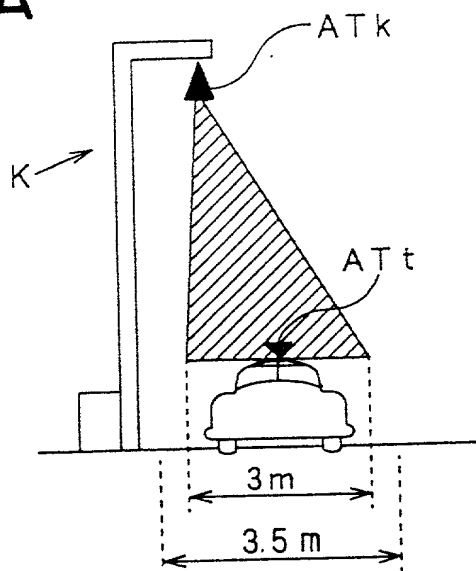


FIG. 10B

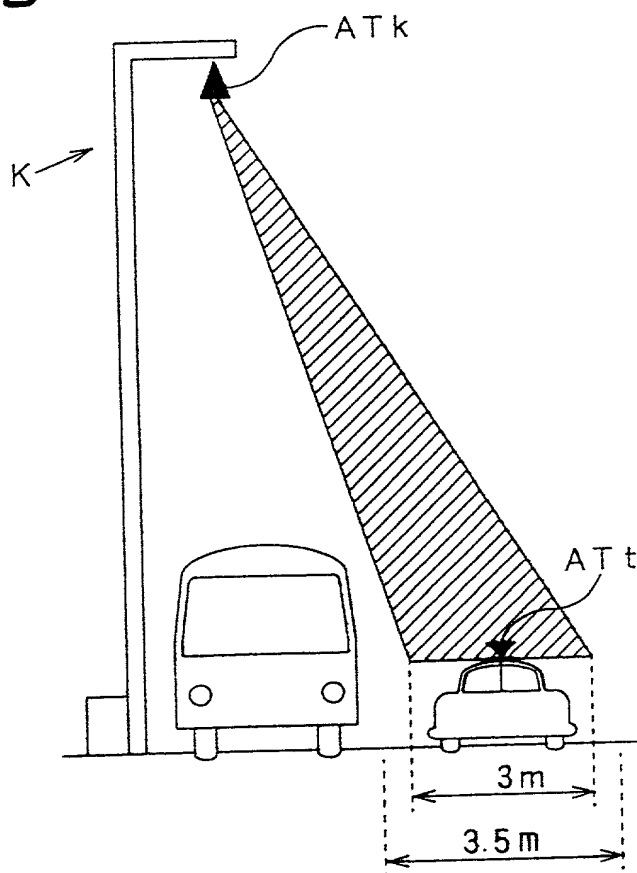


FIG. 11A

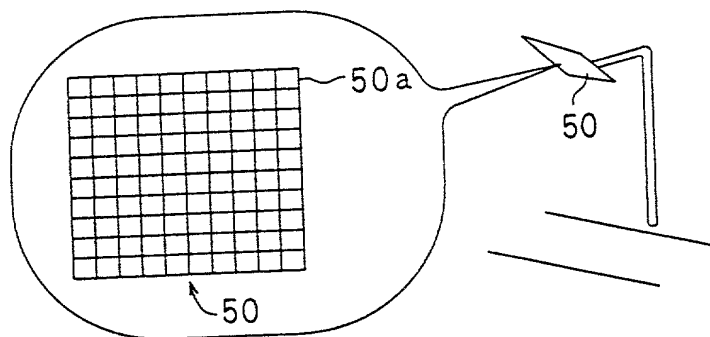


FIG. 11B

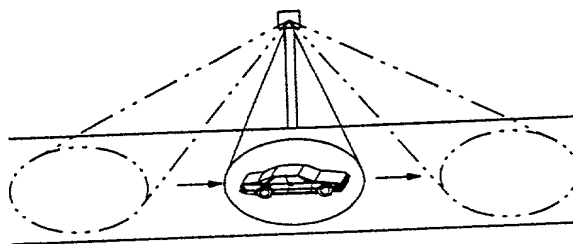


FIG. 11C

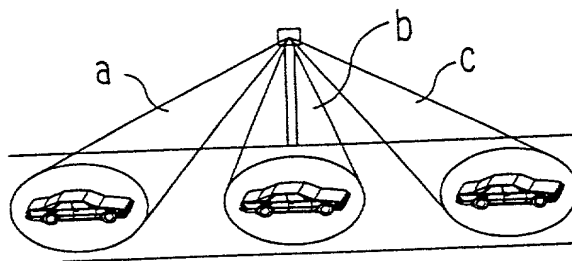


FIG. 11D

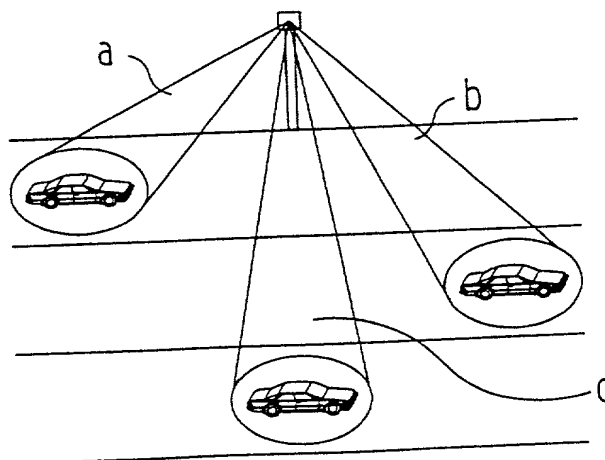


FIG. 12A

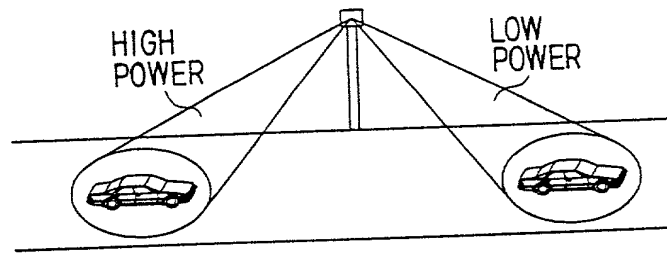


FIG. 12B

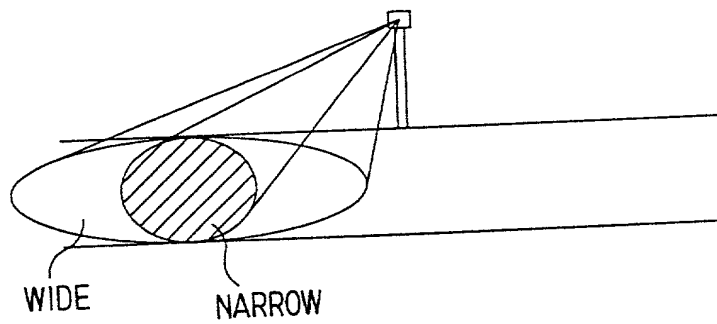
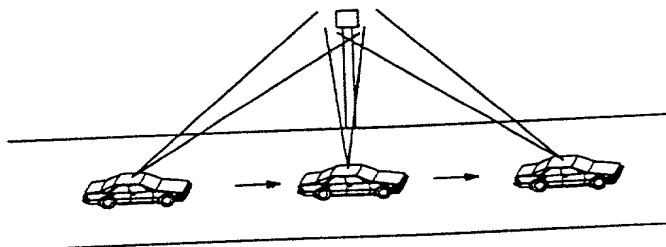
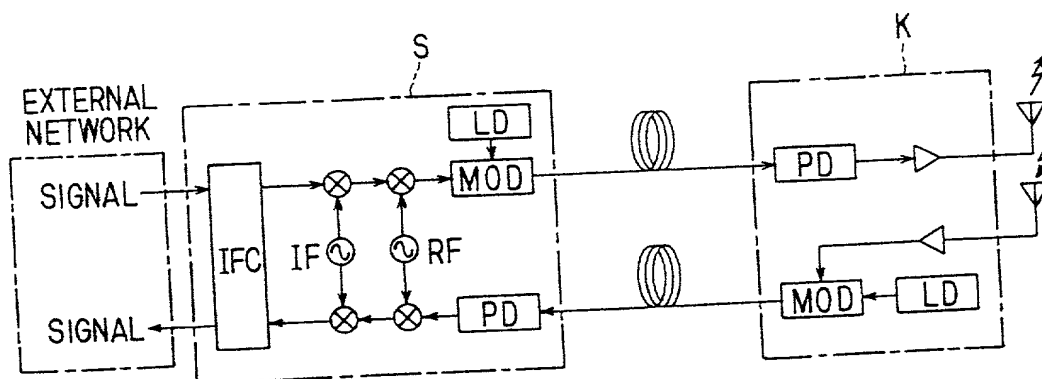


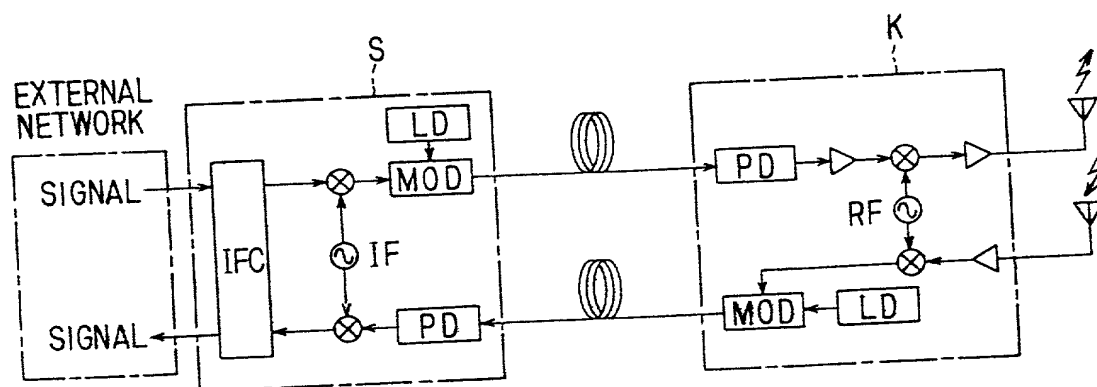
FIG. 12C



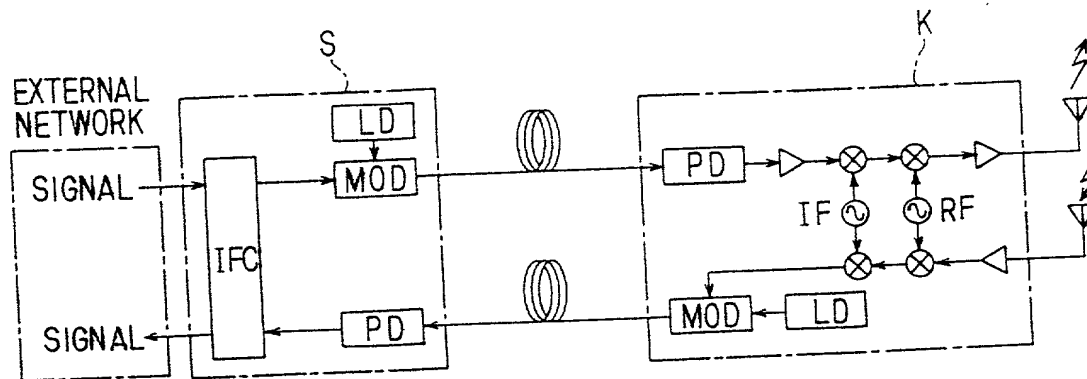
# FIG. 13A



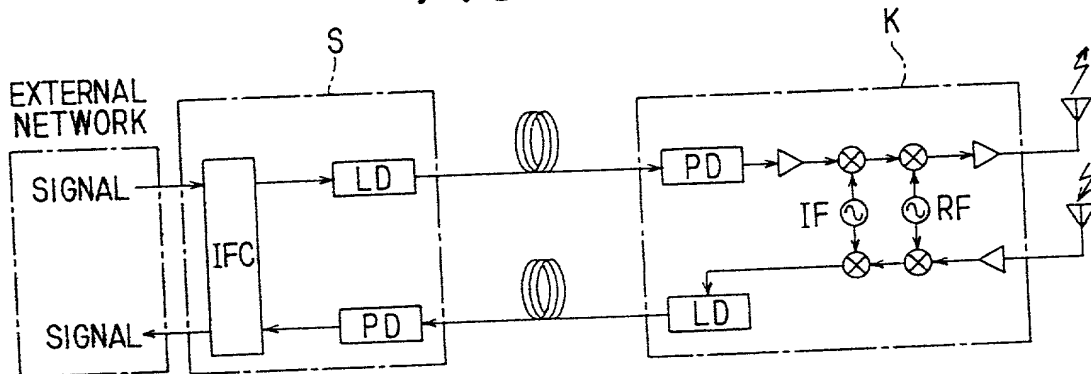
# FIG. 13B



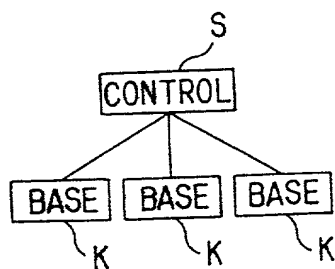
# FIG. 14A



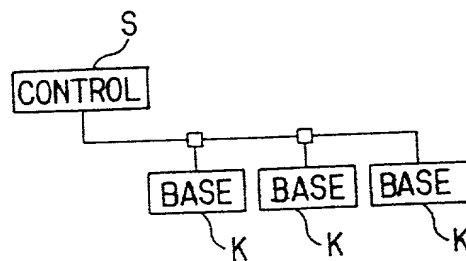
# FIG. 14B



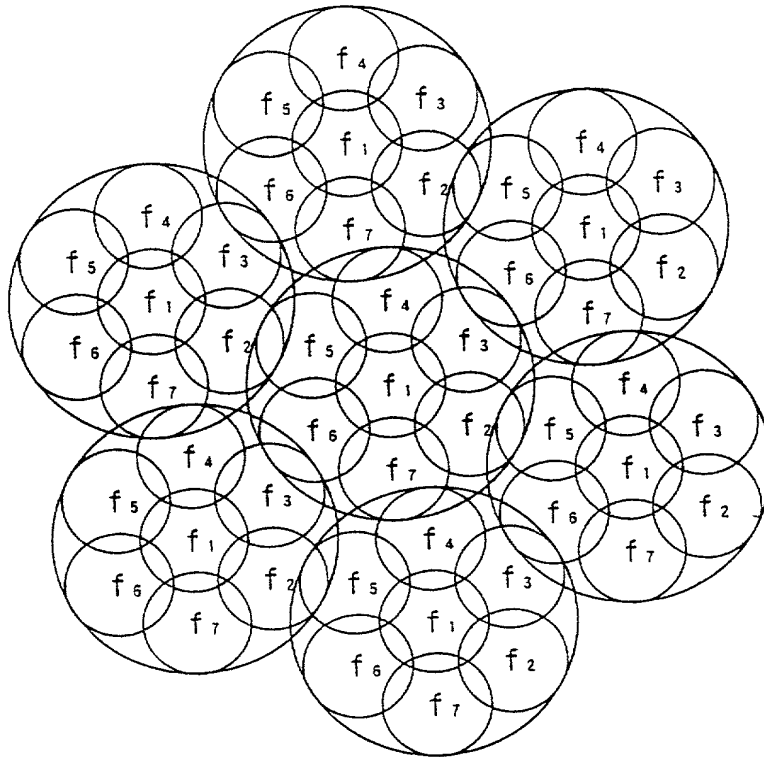
# FIG. 14C



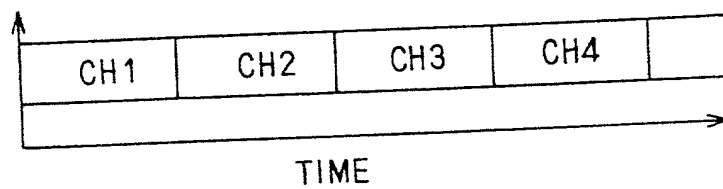
# FIG. 14D



**FIG. 15A** RELATED ART



**FIG. 15B** RELATED ART



**FIG. 15C** RELATED ART

